

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

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EVOLVED WIRELESS, LLC,

Plaintiff,

v.

APPLE INC.,

Defendant.

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) C.A. No. 15-542-JFB-SRF  
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) **FILED UNDER SEAL**  
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EVOLVED WIRELESS, LLC,

Plaintiff,

v.

HTC CORPORATION and HTC  
AMERICA, INC.,

Defendants.

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) C.A. No. 15-543-JFB-SRF  
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EVOLVED WIRELESS, LLC,

Plaintiff,

v.

MOTOROLA MOBILITY.,

Defendant.

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) C.A. No. 15-544-JFB-SRF  
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) **FILED UNDER SEAL**  
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EVOLVED WIRELESS, LLC,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO, LTD.  
and SAMSUNG ELECTRONCS  
AMERICA, INC.,

Defendants.

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) C.A. No. 15-545-JFB-SRF  
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EVOLVED WIRELESS, LLC,

Plaintiff,

V.

ZTE CORPORATION, ZTE (USA) INC.,  
and ZTE SOLUTIONS, INC.,  
AMERICA, INC.,

Defendants.

C.A. No. 15-546-JFB-SRF

**FILED UNDER SEAL**

**EVOLVED WIRELESS'S OPPOSITION BRIEF TO DEFENDANTS'  
MOTION TO EXCLUDE TESTIMONY OF DR. PUTNAM**

Dated: January 12, 2018

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## **I. INTRODUCTION**

The Defendants' arguments for excluding Evolved Wireless, LLC's ("Evolved") damages expert, Dr. Jonathan Putnam, are without merit. Dr. Putnam employed a proper foundation and methodology for the opinions in his reports. His analysis applies sound economic principles to the facts of these cases to arrive at a fair, reasonable and non-discriminatory ("FRAND") royalty rate. The Defendants do not challenge Dr. Putnam's qualifications, but rather seek to exclude his testimony in its entirety based on unsupported claims that his opinions are not reliable. Dr. Putnam's opinions more than satisfy the requirements of Rule 702 of the Federal Rules of Evidence, *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), and Federal Circuit case law.

Defendants' criticisms of Dr. Putnam are disagreements over what the outcome would be in a hypothetical negotiation for a FRAND license to the patents-in-suit. Such disagreements do not justify the blanket exclusion of Dr. Putnam's testimony. Disagreements with Dr. Putnam's opinions are appropriate for cross examination or the presentation of contrary evidence at trial. Defendants' arguments go the weight of Dr. Putnam's testimony rather than its admissibility. Accordingly, Defendants' motion should be denied.

## **II. NATURE AND STAGE OF THE PROCEEDINGS**

On June 25, 2015, Evolved Wireless filed these patent infringement lawsuits alleging, *inter alia*, that Defendants infringed various patents declared essential to the LTE communications standards, including Evolved's U.S. Patent Nos. 7,809,373 (the "'373 Patent") and 7,881,236 (the "'236 Patent) (together the "patents-in-suit"). D.I. 1.<sup>1</sup> Expert discovery closed

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<sup>1</sup> Docket citations (D.I.) are from *Evolved Wireless, LLC v. Apple Inc.*, No. 15-542-JFB-SRF. The referenced events occurred on the same date for all six cases.

on August 18, 2017. D.I. 144. This Court issued an order regarding page limits for *Daubert* briefing and entered a stipulation setting briefing deadlines. D.I. 236 and D.I. 253. On December 8, 2017, Defendants filed their joint motion to exclude testimony of Dr. Putnam pursuant to Fed. R. Evid. 702. D.I. 278. Per the Court's orders, Evolved Wireless now submits this brief in opposition.

### **III. SUMMARY OF THE ARGUMENT**

1. Dr. Putnam's forward citation analysis is a reliable method of ranking the patents-in-suit relative to other actually essential LTE patents. Forward citation analysis has long been an accepted method of valuing patents. Indeed, some of Defendants' own proffered damages experts have admitted utilizing this type of analysis in their prior work valuing patents. Defendants' claim that Dr. Putnam's analysis includes patents "having no connection to LTE" is factually incorrect and unsupported. Even if this claim were true, Dr. Putnam's method implies a higher value for the patents-in-suit. Moreover, Defendants' argument that Dr. Putnam needed to personally analyze each patent declared essential to the LTE standard, rather than rely on an established database of such patents, is not what is required under *Daubert*. If anything, Defendants' arguments go to the weight of Dr. Putnam's testimony, not its admissibility.

2. Dr. Putnam's "top-down" methodology apportioned the aggregate value of LTE among the patent families that create that value and determined the relative value of each family. Federal Circuit case law does not require that Dr. Putnam's damages model start with the smallest saleable patent practicing unit, which the Defendants argue is the baseband chipset. The technical experts in these cases do not agree that the baseband chipset embodies the patented technology at issue. And Defendants have not identified any LTE licenses produced in these cases that meter the royalty using the baseband chipset. Defendants' disagreement with Dr.



Putnam's decision to start with the price of handsets goes to the weight of his testimony and does not render his opinion inadmissible under *Daubert*.

3. Dr. Putnam's equal division of gains between the class of innovators and the class of implementers of LTE technology is tied to the facts of these cases. The patents-in-suit are declared essential to the LTE standard developed by European Telecommunications Standards Institute ("ETSI"). ETSI's IPR Policy seeks to balance the needs of implementing standardized technology and the rights of LTE patent owners, in the aggregate. Dr. Putnam's equal division of gains between these groups is consistent with—if not required by—this Policy. Defendants' disagreement about the appropriate division goes to the weight of Dr. Putnam's testimony rather than the admissibility. Defendants' can address their disagreement during cross-examination at trial or with contrary evidence, but it is not a basis to exclude Dr. Putnam's testimony.

#### **IV. COUNTERSTATEMENT OF THE FACTS**

##### **A. Dr. Putnam's Qualifications**

Dr. Putnam is the founder and principal of Competition Dynamics Inc. He specializes in economic and financial analysis pertaining to intellectual property and antitrust-related litigation. D.I. 279, Ex. A ¶ 1. Dr. Putnam received B.A., M.A. and Ph.D. degrees in economics from Yale University. *Id.* ¶ 2. His doctoral dissertation, *The Value of International Patent Rights*, was the first to measure the world value of patent rights. *Id.* Based on his research, he received a grant from the U.S. National Science Foundation to measure the value of corporate patent portfolios. *Id.* Dr. Putnam held an endowed chair in the law and economics of intellectual property at the University of Toronto. He has taught intellectual property management at Boston University Graduate School of Management; advanced topics in technical properties at Columbia University Schools of Law and Business; the economics of technology at Yale University; and microeconomic theory, industrial organization, and the economics of finance at Vassar College. *Id.* ¶ 4.

For more than 20 years, Dr. Putnam has provided expert testimony in patent, copyright, trade secret, antitrust and breach of contract actions before state, federal and bankruptcy courts, the U.S. Federal Trade Commission and International Trade Commission, U.S. and international commercial arbitrations, and the Federal and Supreme Courts of Canada. *Id.* ¶ 4. His testimony has been admitted in courts in several jurisdictions, including the District of Delaware.

Dr. Putnam has testified before the International Trade Commission regarding the definition and measurement of FRAND terms and conditions. *Id.* ¶ 5. He has also testified regarding the determination of FRAND terms and conditions or royalties for telecommunications patent portfolios in U.S. federal court, abroad, and in multiple international arbitrations. *Id.* ¶ 6.

Defendants do not dispute Dr. Putnam's qualifications.

#### **B. FRAND Obligations Under ETSI**

The patents-in-suit are declared essential to Long Term Evolution ("LTE") telecommunications standard developed by members of ETSI. D.I. 1 ¶ 7. Evolved has committed to licensing the patents-in-suit on FRAND terms and conditions. ETSI has an Intellectual Property Rights ("IPR") Policy that sets forth various requirements for its members participating in the standards setting process. One of the objectives of the ETSI IPR Policy is to "seek[] a **balance** between the needs of standardization for public use in the field of telecommunications and the rights of owners of IPRs." Ex. 1 at 35 (emphasis added).

The ETSI IPR Policy also states that "IPR holders whether members of ETSI and their AFFILIATES or third parties, should be **adequately and fairly rewarded** for the use of their IPRs in the implementation of STANDARDS and TECHNICAL SPECIFICATIONS." Ex. 1 at 35 (emphasis added). Clause 6.1 of the ETSI IPR Policy provides:

When an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable

undertaking in writing that it is **prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory (“FRAND”) terms and conditions . . . .**

*Id.* at 35-36 (emphasis added). ETSI has never defined FRAND nor set forth specific criteria for how IPR holders are to determine FRAND terms and conditions.

ETSI has also issued an “IPR Guide,” which “is intended to help ETSI Members and any other party involved in ETSI’s standardization activities . . . to understand and implement the Institute’s IPR Policy.” Ex. 1 at 51. The IPR Guide clarifies that “[s]pecific licensing terms and negotiations are commercial issues between the companies and shall not be addressed within ETSI.” Ex. 1 at 64. Thus, the IPR Policy does not disclose any particular or preferred methods for licensing IPRs. Nor does it require or prohibit any particular commercial licensing terms.

### **C. Dr. Putnam’s Methodology**

Dr. Putnam was asked to identify the value of Evolved’s patents-in-suit using methods that are consistent with U.S. patent law, FRAND principles, industry practice and prices, and the scientific standards of the economics profession. D.I. 279, Ex. A ¶ 13. Dr. Putnam took into account that courts have recognized the necessity, in the FRAND context, to make certain modifications to the standard *Georgia-Pacific* framework for determining a reasonable royalty.<sup>2</sup> *Id.* ¶ 16. He views standard-essential technology, such as the patents-in-suit, as a common input for which all industry participants must pay on similar terms (*e.g.*, jet fuel for airlines). *Id.* ¶ 15. Dr. Putnam understands the FRAND obligation, specifically the non-discriminatory element, to mean that Evolved must offer or should agree to similar terms with all Defendants. *Id.* ¶¶ 15, 17. For these reasons, Dr. Putnam computed an industry-wide fair market value of LTE standardized technology, based on the incremental handset price paid by consumers (of the devices sold by

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<sup>2</sup> *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 884 (9th Cir. 2012); *In re Innovatio IP Ventures, LLC*, Case No. 11-9308, 2013 U.S. Dist. LEXIS 144061 (N.D. Ill. Oct. 3, 2013); *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).

Defendants and other vendors) for the ability to use LTE technology instead of the next-best alternative (third-generation, or 3G, technology). Dr. Putnam's ensures that Evolved's share of that value reflects the relative contribution of its technology in his calculation of a FRAND royalty rate for the patents-in-suit. *Id.* ¶ 18.

Dr. Putnam relies on a version of the "top-down" approach adopted in *Innovatio* and *Microsoft v. Motorola*. *Id.* ¶ 136. Under the "top-down" approach, Dr. Putnam relies on formal economic methods and the economic literature on the distribution of patent values to:

- (1) Determine the aggregate incremental value of LTE on a per-handset basis after allocating a fair portion of that value to implementers ( $V$ ).
- (2) Count the number of standard essential inventions  $N$  that created the value  $V$ , and compute LTE's mean incremental value per handset, per invention ( $V/N$ ).
- (3) Rank the patents-in-suit within these  $N$  LTE essential inventions, assigning a percentile rank  $n$  to each invention.
- (4) Divide the aggregate value  $V$  so as to ensure that the sum of individual invention values  $V_n$  is equal to  $V$ , based on the economic literature on the distribution of patent values, by
  - (a) Computing a ratio  $K_n$  for each Evolved invention, based on its ranking, which expresses its value relative to the average value  $V/N$ , and
  - (b) Multiplying  $K_n$  by  $V/N$  to obtain the value of the individual invention  $V_n$ .

*Id.* ¶ 143.

### **1. Incremental Value of LTE**

Dr. Putnam determined the incremental value of LTE technology relative to its predecessor 3G technology, the next-best alternative to LTE, but isolating the value placed on those technologies by consumers. To determine the aggregate incremental value of LTE

technology, Dr. Putnam analyzed the prices of LTE handsets relative to 3G-only handsets, controlling for changes in the features of each over time. *Id.* ¶ 145. Dr. Putnam distinguished the value of LTE technology from the value of other characteristics using a hedonic price regression. Economists regularly use hedonic regressions, in particular, to explain product prices as a function of differences in marketed product features. By identifying “implicit prices” associated with individual features, such as the size of the screen, hedonic regression measures the composition of a product’s price in terms of the average value attributed to each feature. *Id.* ¶¶ 145-48. To accomplish this measurement, Dr. Putnam employed a comprehensive set of data on handset revenues, quantities and features from IDC, a respected industry source. *Id.* at 106-15, ¶ 151, Schultz Decl. Ex. 2 at Ex. 11. Treating LTE as one feature of a handset, Dr. Putnam used regression analysis to compute the “LTE premium,” the difference between the price of a basic LTE handset and the price of an otherwise comparable 3G handset, controlling for all other observed features and characteristics. He calculated the LTE premium to be approximately \$84.40 per handset in the United States. D.I. 279, Ex. A ¶ 155.

Dr. Putnam then identified the most appropriate basis for dividing this premium between the group of LTE innovators, who created it, and the group of LTE implementers (and their customers), who benefit from it. Dr. Putnam observed that, while each group has opposing interests, their repeated joint participation in successive generations of telecommunication standards indicates that, on average, each group’s interests have been and will be satisfied. Considering the countervailing nature of those interests in particular, and the findings of economic principles and investigations of economic behavior in general, Dr. Putnam concluded that an equal division of gains between innovators and implementers, industry-wide, is the *only* possible equilibrium outcome. *Id.* ¶¶ 161-171. For example, in the FRAND context, bargaining

positions are symmetric because implementers of the LTE standard are entitled to “fair” terms and conditions, while innovators are symmetrically entitled to be “adequately and fairly rewarded” for the use of their inventions. *Id.* ¶ 167. And importantly, an objective of the ETSI IPR Policy, which is the basis for Evolved’s FRAND commitment, is to “seek[] a **balance** between the needs of standardization for public use in the field of telecommunications [i.e., implementation of the technology] and the rights of owners of IPRs.” Ex. 1 at 35 (emphasis added). Dr. Putnam found strong theoretical and empirical grounds to conclude that innovators and implementers expect to divide gains evenly, resulting in the innovator’s share of the incremental value of LTE to be \$42.20 per handset. D.I. 279, Ex. A ¶¶ 20, 167.

## 2. Count: LTE Essential Patents

After determining the innovator’s share of the incremental value of LTE, Dr. Putnam divided the value among inventions that contributed to LTE. D.I. 279, Ex. A ¶ 176 and Schultz Decl. Ex. 2 at Ex. 9. To do this, Dr. Putnam extracted patent families that have been disclosed as potentially essential to LTE from a database of standard-essential patents, maintained by IPlytics. D.I. 279, Ex. A ¶ 176. Based on the extraction, Dr. Putnam found 3,540 patent families disclosed as potentially essential to LTE. *Id.* ¶ 177.

Because the ETSI rules only request the disclosure of patents that “may be, or may become” essential to the standard, there is no agreed upon identification or count of patents that are actually essential to the LTE standard. *Id.* ¶ 178. To estimate the number of patent families that are actually essential to LTE relative to all that were disclosed as potentially essential. *Id.* ¶ 178. Because the studies disagree as to the portion of disclosed essential patent families that are actually essential to LTE, Dr. Putnam conducted a statistical analysis across all available studies to compute the average, industry-wide probability that a patent family is essential to LTE once it has been disclosed as essential to the standard. *Id.* ¶¶ 178-79.

Controlling for systematic differences exhibited by major patentees, and differences in method between studies, Dr. Putnam calculated the mean expected-essentiality rate to be approximately 38.5% of the sample of potentially essential patent families. *Id.* at 125-131, ¶ 179, and D.I. 279 Ex. O. The 38.5% essentiality rate is not based only on a study of patents declared essential by specific tech companies that work in wireless communications, as Defendants claim.<sup>3</sup> Using the 38.5% essentiality rate, Dr. Putnam calculated approximately 1,364 actually essential LTE patent families. D.I. 279, Ex. A ¶ 180. Dividing the innovator's \$42.20 share of the incremental value of LTE among these 1,364 patent families, results in an average value of about \$0.031 (or 3.1 cents) per patent family, per handset.

### 3. Rank: Patent Citation Analysis

To determine where the patents-in-suit rank among the 1,364 actually essential LTE patent families, Dr. Putnam employed a patent citation count method<sup>4</sup>—a method accepted by several courts and employed by several of the Defendants' own experts.<sup>5</sup> *Id.* ¶ 181. The patents-in-suit

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<sup>3</sup> Defendants refer to two tables in Dr. Putnam's Opening Report to support their claim, but Defendants seem to misunderstand the information in those tables. D.I. 279 Exs. N; O. The names of patentees found in both Exhibits merely reflect variables in the regression model Dr. Putnam used to compute an industry-wide essentiality rate. The presence of those names *does not* imply that patents owned by other entities were excluded from his analysis. As is standard, to control for systematic differences in essentiality rates demonstrated by large patentees, Dr. Putnam included variables for these entities in his regression. Small patentees were put into a single category—not excluded. D.I. 279 Ex. N.

<sup>4</sup> Dr. Putnam's patent citation analysis made adjustments for the age of the patents because older patents have more time to accumulate citations. *Id.* To account for a patent's age, Dr. Putnam computed a "score," which is the ratio of the actual number of citations received to the number of expected citations, given the patent's age. *Id.* Dr. Putnam then ranked the patents by their score. *Id.*

<sup>5</sup> For example, this Court recently found that a forward citation analysis conducted by Gregory Leonard, HTC's damages expert in Case No. 15-543, was a reliable method of valuing technology. *Intel Corp. v. Future Link Sys., LLC*, C.A. No. 14-377, 2017 U.S. Dist. LEXIS 91699, at \*15-16 (D. Del. Jun. 1, 2017). In addition, Richard Eichmann, Motorola's damages expert in Case No. 15-544, used forward citation analysis to estimate the value of patents in another case and that court also found the method to be reliable. *Better Mouse Co. v. SteelSeries ApS*, No. 14-198, 2016 U.S. Dist. LEXIS 16611, at \*7 (E.D. Tex. Jan. 5, 2016).

both rank in the top 50% of all patents, with individual rankings in the 69.2 percentile for the '236 patent and the 97.9 percentile for the '373 patent. *Id.* ¶ 182 and D.I. 279, Ex. D.

#### **4. Divide: Apportionment of LTE Incremental Value**

Dr. Putnam reviewed and relied on the economic literature on patent value distributions. *Id.* ¶ 185. This literature confirms that the value distribution of patents is highly skewed, which means that there are many low-value patents, while only a few have very high value. *Id.* at 134. Based on his review and analysis of this literature, Dr. Putnam calculated that the '373 patent's rank implies that it is worth 7.39 times the value of the average LTE patent and the '236 patent is worth 0.55 times the value of the average LTE patent. D.I. 279, Ex. A at 137 and D.I. 279, Ex. D. This results in a royalty of \$0.229 for the '373 patent and \$0.017 for the '236 patent. *Id.*

### **V. LEGAL STANDARD**

The overarching goal of *Daubert's* gatekeeping requirement is to make certain that an expert, whether basing testimony upon professional studies or personal experience, must employ “in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Cryovac Inc. v. Pechiney Plastic Packaging, Inc.*, 430 F. Supp. 2d 346, 362 (D. Del. 2006) (quoting *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152 (1999)). The *Daubert* analysis is a flexible one and the list of *Daubert* factors neither necessarily nor exclusively applies to all experts in every case. *Daubert*, 509 U.S. at 593 (declining to set forth a “definitive checklist or test”). The “focus, of course, must be solely on principles and methodology, not on the conclusions that they generate.” *Id.* at 595. This Court has interpreted Rule 702 as embodying “three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit.” *Leonard v. Stemtech Health Scis., Inc.*, No. 08-067, 2013 U.S. Dist. LEXIS 138446, at \*7 (D. Del. Sep. 23, 2013) (quoting *Elcock v. Kmart Corp.*, 223 F.3d 734, 741 (3d Cir. 2000)).



The “rejection of expert testimony is the exception rather than the rule.” Fed. R. Evid. 702, Advisory Committee Notes (2000). Overall, “Rule 702 embodies a ‘liberal policy of admissibility.’” *B. Braun Melsungen AG v. Teramo Med. Corp.*, 749 F. Supp. 2d 210, 222 (D. Del. 2010) (quoting *Pineda v. Ford Motor Co.*, 520 F.3d 237, 243 (3d Cir. 2008)). Indeed, infirmities in expert opinions should be properly addressed through cross-examination, presentation of contrary evidence, or jury instruction. *Daubert*, 509 U.S. at 596. The Court’s role “as a gatekeeper is not intended to serve as a replacement for the adversary system.” *Leonard*, 2013 U.S. Dist. LEXIS 138446, at \*23 (quoting *Recursion Software Inc. v. Double-Take Software, Inc.*, No. 10-403, 2012 U.S. Dist. LEXIS 63299, at \*4 (E.D. Tex. May 4, 2012)).

## **VI. ARGUMENT**

Dr. Putnam’s analysis and opinions are the product of the requisite level of intellectual rigor and are supported by relevant damages law. While Defendants may disagree with Dr. Putnam’s analysis and opinions, that disagreement does not render his opinions inadmissible. Moreover, when FRAND obligations drive the damages analysis as they do here, a more flexible approach is necessary. *Microsoft Corp. v. Motorola, Inc.*, 795 F.3d 1024, 1042 (9th Cir. 2015) (the “need for flexibility in determining a royalty for a RAND-encumbered patent”) (citing *Ericsson, Inc. v. D-Link Sys.*, 773 F.3d 1201, 1230-31 (Fed. Cir. 2014)). Dr. Putnam’s methodology is sound and his testimony will be helpful to the jury in evaluating a FRAND royalty rate for the patents-in-suit.

### **A. Dr. Putnam’s forward citation analysis is reliable and admissible.**

Defendants do not dispute that forward citation analysis can be a measure of a patent’s value. Indeed, forward citation analysis, a method of estimating the value of a particular patent based on the number of times the patent is cited by later patents, “has been recognized in the academic literature as reliable since the 1990s.” *Comcast Cable Commc’n, LLC v. Sprint*

*Commc'ns Co.*, 218 F. Supp. 3d 375, 383 n.8 (E.D. Pa. 2016). The court in *Comcast* identified a meta-analysis of published research on forward citation analysis, which found that “forward citation intensity is, in fact, correlated with economic value.” *Id.*<sup>6</sup> Importantly, forward patent citation analysis offers an objective and efficient way to rank the relative importance of many patents at once. D.I. 279, Ex. A at 131. In addition, several of Defendants’ damages experts, including Richard Eichmann, have used forward citation analysis and published articles regarding the analysis. *See* Ex. 6. Dr. Putnam’s citation analysis reliably applied principles and methods to sufficient facts.

**1. Dr. Putnam relies on more than sufficient data to estimate the number of actually essential LTE patent families.**

Dr. Putnam relies on a database from IPlytics that identified 3,540 patent families that had a least one patent disclosed as potentially essential to the LTE standard.<sup>7</sup> Dr. Putnam chose the patent family as the relevant unit of observation because, under ETSI’s IPR Policy, the disclosure of any patent family member automatically extends to other members of the same family. D.I. 279, Ex. A ¶ 173. In addition, Dr. Putnam observed that the practice of Defendants,

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<sup>6</sup> Although a judge in a recent decision declined to consider the specific forward citation analysis presented in that case, the court limited the finding to the circumstances of that case. *TCL Commun. Tech. Holdings, Ltd. v. Telefonaktiebolaget LM Ericsson*, No. 14-341, 2017 U.S. Dist. LEXIS 214003, at \*77-78 (C.D. Cal. Dec. 21, 2017). In *TCL*, Dr. Leonard (TCL’s expert in that case and HTC’s expert in these cases) used forward citation analysis to confirm his view on the value of Ericsson’s patents through TCL’s “importance and contribution analysis.” But the court found several flaws with TCL’s “importance and contribution analysis,” including that the analysis was only limited to Ericsson’s patents and was never applied to the rest of the patents in the standard. The court in *TCL* was not persuaded by Dr. Leonard’s forward citation analysis because the results “generally contradicted” the analysis done by TCL’s technical expert. The proposition and analysis offered in *TCL* is not what Dr. Putnam has offered for his forward citation analysis in this case.

<sup>7</sup> In offering alternative forward citation analyses in their expert reports, Defendants’ experts also use patent families as the relevant unit of observation. *See, e.g.*, Ex. 3 ¶ 47 and Table 6 and Ex. 4 at 21-22 and Figure 6.

based on the licenses they produced, is to grant licenses to patents families. *Id.* IPlytics populates its database with information extracted directly from ETSI. *Id.* at 143. Each disclosure record from the IPlytics database, which includes hundreds of thousands of disclosures to the GSM, UMTS, CDMA and LTE standards, contains a patent reference that is associated with an “INPADOC family members field.”<sup>8</sup> *Id.* This field specifies the disclosed patent and its family members. *Id.* Dr. Putnam used this field to create a list of unique patent and application numbers with an indicator of the standard to which each patent or application has been disclosed. *Id.* Controlling for systematic differences in firms and studies, Dr. Putnam calculated the mean essentiality rate to be approximately 38.5% of the sample of potentially essential patent families. D.I. 279, Ex. A at 125-131, ¶ 179, and D.I. 279, Ex. O. Using the 38.5% essentiality rate, Dr. Putnam calculated approximately 1,364 actually essential LTE patent families. D.I. 279, Ex. A ¶ 180.

Using a second database from Thomson Innovation, which closely tracks bibliographic information related to patents worldwide, Dr. Putnam downloaded bibliographic details for the list of disclosed patents and their family members, which included forward citations to U.S. patents on the list. D.I. 279, Ex. A at 143-144. Using unique INPADOC patent identifiers, Dr. Putnam associated relevant information, such as priority and expiration dates, from each patent within each family to the family-level observation. *Id.* Because citations are given to patents, not to families, to rank patent families using forward citations, Dr. Putnam defined the “representative patent” for each family as the U.S.-issued member having received the most citations from other U.S.-issued patents.”<sup>9</sup> *Id.* at 144. He then ranked the LTE families according

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<sup>8</sup> INPADOC stands for International Patent Documentation and is a database produced and maintained by the European Patent Office. It contains worldwide patent families and legal status information. <https://www.epo.org/searching-for-patents/legal/inpadoc.html#tab-1>

<sup>9</sup> Each of the patents-in-suit is the most-cited U.S.-issued patent of its family. Ex. 5 at 104:1-10.

to the number of citations received by each “representative patent,” excluding families with no U.S.-issued patent. *Id.*

In arguing that the data from IPLytics data is inaccurate, Defendants ignore that IPLytics pulls its data directly from the ETSI database and that Dr. Putnam used the most highly-cited U.S.-issued member of each family as the “representative patent.” In claiming that certain patents purportedly “have nothing to do with LTE,” Defendants conducted no analysis to confirm whether the “representative patent” came from a family that included a patent that was disclosed as potentially essential to the LTE standard. Instead, Defendants merely identify the title of certain “representative patents” and claim, without basis, that the entire family has purportedly “no connection to LTE.” In contrast, Dr. Putnam has confirmed that the “representative patents” identified in Defendant’s brief have a family member in the IPLytics database that matches a disclosure statement to the LTE standard at ETSI.

Even if there are errors in the IPLytics database, which Evolved disputes, Dr. Putnam’s methodology takes into account potential errors and “Rule 702 requires only *sufficient* data and facts, not *perfect* data and facts.” *Arnold v. Canal Barge Co.*, No. 13-4966, 2014 U.S. Dist. LEXIS 74744, at \*10 (E.D. La. Jun. 2, 2014) (emphasis in original); *see also Del. Display Grp. LLC v. Lenovo Group Ltd.*, No. 13-2108-RGA, 2017 U.S. Dist. LEXIS 6670, at \* 4 (D. Del. Jan. 18, 2017) (“[E]stimating a reasonable royalty is not an exact science.”). In *Arnold*, the Defendant criticized the value the expert plugged into his calculation for different variables relating to the evaporation rate of ammonia in water, the amount of water used to dilute the ammonia, and the size and ventilation of the wheelhouse. *Arnold*, 2014 U.S. Dist. LEXIS 74744 at \*10. The expert relied on a published report and deposition testimony for the data underlying his opinion. The court reasoned that if the expert had personally measured and inspected the wheelhouse, it would

have improved the data. *Id.* Despite this, the court in *Arnold* found the expert relied on sufficient facts to present his opinion to the jury. *Id.*

Here, Defendants expect perfect facts and argue that Dr. Putnam should have personally inspected every disclosure identified by IPLytics rather than rely on a reputable company's database of information extracted from ETSI. Similar to *Arnold*, there is sufficient data for Dr. Putnam to rely on for his citation analysis to satisfy Rule 702, particularly in light of the "inherent uncertainty in calculating a reasonable royalty." *In re Innovatio*, No. 11 C 9308, 2013 U.S. Dist. 144061, at \*162 (N.D. Ill. Oct. 3, 2013). In addition, given that ETSI does not keep track of patents that are actually essential to a particular standard, variance in the number of patent families that are actually essential to standard is expected. For example, in *TCL v. Ericsson*, Dr. Leonard, TCL's expert and HTC's expert in this litigation, concluded that there were 1,673 essential 4G patent families. *TCL*, 2017 U.S. Dist. LEXIS 214003, at \*53. The court in *TCL* then adjusted TLC's count down to 1,481—a figure even closer to Dr. Putnam's 1,364 actually essential patent families. *Id.* at \*59. Given the hundreds of thousands of disclosures to ETSI and over 30,000 to LTE, alone, Dr. Putnam relied on the best information available to him for identifying patent families that had a least one patent disclosed to the LTE standard. *Daubert* does not preclude experts from relying on data from reputable sources like IPLytics or ETSI.

**2. Defendants mischaracterize Dr. Putnam's methodology, which takes into account potential errors in the data from third party sources.**

Even if the Court were to accept that there were errors in LTE disclosure records within either the IPLytics or ETSI databases, Dr. Putnam's method recognizes that data may be imperfect and provides a formula to adjust for potential errors, including those the Defendants allege exist here. D.I. 279, Ex. A at 134 n. 225 (incorporating Dr. Putnam's Value Shares of Technologically Complex Products" (2014)); Putnam Decl., Ex. C at 22-23. Under *Daubert*, one

indication of a reliable method is the “known or potential rate of error.” *Daubert*, 509 U.S. at 594.

Dr. Putnam satisfies *Daubert* by recognizing and accounting for the fact that “parties have obvious incentives to add or subtract patents ranked higher than [the rank of the asserted patent]—there is likely disagreement as to the rank of the improperly added patents,” Putnam Decl., Ex. C at 22.

Using Equations 21-22 from his *Value Shares* article, Dr. Putnam’s method accounts for potential data errors by calculating the change in value for a specific patent after improperly-added patents are removed. Equation 21 provides a formula by which to determine the true rank of a patent if (1) the amount by which the sample of standard essential patents has been inflated, and (2) the share of the inflated patents that rank above the asserted patent. Those variables then enter Dr. Putnam’s Equation 22, which calculates the corrected value given the originally claimed rank of the asserted patent. If Defendants were able to prove their claim that the IPLytics (or ETSI) data Dr. Putnam used included LTE patent families that had not been truly disclosed to the standard, then the true number of LTE patent families will be fewer after removing the improperly included families. With fewer families in the sample, the value of the remaining families increases. Applying Equations (21) and (22) to the data and Defendants’ allegations in their brief and Love Declaration (D.I. 279) results in an increase of the per unit rate from \$0.229 to \$0.301 for the ’373 patent and an increase from \$0.017 to \$0.019 for the ’236 patent. Ex. E to Putnam Decl. Because he took into account this “potential rate of error,” Dr. Putnam’s methodology is sound.<sup>10</sup>

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<sup>10</sup> Further investigation of the IPLytics data show that the *true* error implied by Defendants’ disputed 513 LTE families is inconsequential. As more patents are disclosed to LTE over time, the likelihood that each new disclosure contains a *new* family decreases (*e.g.*, there are 3,027 LTE families “undisputed” by Defendants, but those families were disclosed to ETSI over 33,000 times). This effect can be computed precisely, from the undisputed data, using standard methods. Dr. Putnam did this, and demonstrated the true number of new LTE families that are expected to be

In arguing that Dr. Putnam is making a patent-to-patent comparison as opposed to an LTE family comparison, Defendants ignore Dr. Putnam's description of his analysis in his report and mischaracterize his deposition testimony. *See* D.I. 278 at 8. Dr. Putnam explained clearly in his report that he ranked patent families, not individual patents:

To rank patent families using forward citations, I define the highest cited U.S. issued member of each family as the "representative patent." ***I then rank families*** using the number of citations to that patent as the unit of observation for the family, excluding families with no U.S. issued patent.

D.I. 279, Ex. A at 144 (emphasis added). And Dr. Putnam did not say otherwise in his deposition. In the passage cited by Defendants (D.I. 279, Ex.C at 100:1-17), he testified that comparing the number of citations to a patent purportedly unrelated to LTE and an LTE patent independently may not be relevant. In any event, in the context of ranking the patents-in-suit among LTE patent families, if a patent that is purportedly unrelated to LTE were included (as a representative member), that does not make the rankings of the Evolved patent families unreliably high.

Defendants also mischaracterize Dr. Putnam's testimony in response to a question regarding the removal of patents purportedly unrelated to LTE. Microsoft's counsel asked Dr. Putnam where Evolved's patents-in-suit would rank if "you were to go through and remove the patents like the ones we've been looking at." D.I. 279, Ex. C at 144:15-16. Contrary to Defendants' assertion, Dr. Putnam far from "conceded that . . . he did not know how the rankings (and their corresponding royalties) would change." (D.I. 278 at 8). Instead, he testified: "you'd have to figure out some sort of comprehensive rule for how you were going to pull things out, and without knowing that rule, you can't figure out how the fraction changes." D.I. 279, Ex. C at 144:20-24. Microsoft's counsel never provided a rule and never asked Dr. Putnam to create one.

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found in the 1,348 "true" disclosures is fewer than 10. This indicates a true error rate, assuming the truth of the Defendants' allegations, of no more than 0.3% ( $=10/3,027$ ). *See* Putnam Decl. at Ex. F.

As described above, assuming Microsoft's "rule" that 513 patents were included improperly, that calculation can be made from Dr. Putnam's *Value Shares* paper.

In short, Defendants' criticisms of Dr. Putnam's citation analysis are based on a misunderstanding of Dr. Putnam's methodology and mischaracterizations of his deposition testimony, none of which provide any basis for excluding Dr. Putnam's testimony. In fact, Defendants have offered no rebuttal expert report or scientific basis to support their argument regarding the alleged flaws in Dr. Putnam's methodology or data. Defendants' arguments go to the weight of Dr. Putnam's testimony rather than its admissibility. Their motion should be denied.

**B. Dr. Putnam's "top-down" approach is a sound methodology for determining a FRAND royalty for the patents-in-suit.**

Dr. Putnam's top-down approach attempts to arrive at an industry standard valuation of LTE, apportion the value of LTE among the patent families that comprise it, and give Evolved its share based on the relative value of Evolved's patents. Dr. Putnam's top-down approach follows a conceptual process adopted by the court in *Innovatio*. 2013 U.S. Dist. LEXIS 144061, at \*162-183. The approach counts the patents that create the total value of the standardized technology, ranks the patents-in-suit within that group, and divides the total value between the patents-in-suit and the remainder. *Id.*; D.I. 279, Ex. A ¶ 143. Defendants criticize Dr. Putnam's top-down approach for allegedly not apportioning the value of the patents-in-suit and for not using the baseband chipset as his starting point for this approach. As described below, each of these criticisms is without merit and is not a basis for excluding Dr. Putnam's testimony.

**1. Dr. Putnam apportions the value of the patents-in-suit from features unrelated to LTE and from other LTE patents.**

Dr. Putnam begins his top-down approach by determining the aggregate incremental value of LTE based on analyzing the prices of LTE handsets relative to the next best alternative, 3G handsets, while controlling for changes in the features of each over time. D.I. 279, Ex. A ¶



145. From this analysis, Dr. Putnam extracts a “fixed effect” that represents the value assigned by market participants to the LTE standard, i.e., the difference in price paid for an LTE handset relative to a 3G handset, everything else being equal. *Id.* Dr. Putnam testified that his “top down analysis is meant to provide a method that applies to everybody in the industry and provides a fair result for everybody in the industry.” Ex. 7 at 69:4-8. His top-down approach apportions the value of LTE from the contributions of other technology in an LTE handset and then isolates the relative value of the patents-in-suit in comparison to other LTE patents. Dr. Putnam’s methodology is not an application of the entire market value rule as Defendants claim. The starting point of his analysis is the value of LTE, not the value of the entire handset.

Defendants argue that Dr. Putnam did not determine “the value of the patents-in-suit *apart* from the value of the LTE standard.” (D.I. 278 at 18). Dr. Putnam computed the incremental value of LTE over 3G, the prior standard. Whatever the value of standardization is, it is reflected in both 3G and LTE and therefore is not part of the difference between them.

In the first step of his top-down approach, Dr. Putnam examined the value that consumers place on LTE in relation to 3G technology, as reflected by price paid, to apportion the value of LTE from other technology in an LTE handset. D.I. 279, Ex. A ¶ 146. To do this, Dr. Putnam performed a hedonic price regression from a comprehensive data set from IDC, an industry source, whose reports on handset revenues, quantities and features rely on data from handset manufacturers themselves. This dataset covered quarterly sales in the U.S. of 3G and LTE handsets from 2010 to 2016. *Id.* ¶ 151. A regression analysis is a standard statistical tool used to isolate individual effects on a dependent variable of multiple independent variables, all of which may be changing simultaneously. *Id.* ¶ 149. A “hedonic” regression analysis refers to the change in product price (*i.e.*, in consumer willingness to pay for a handset), based on the additional

benefit offered by an increase in one of the handset's attributes while controlling for other attributes in the handset. *Id.* Defendants do not challenge Dr. Putnam's use such an analysis.

From his hedonic regression analysis, Dr. Putnam was able to compute the difference in handset price attributable to the presence of LTE technology, controlling for various handset attributes, such as screen size and processor speed, and other observable factors. *Id.* ¶ 152. The other observable factors include: fixed effects associated with the identity of major handset manufacturers, such as Apple's design and brand; a time trend that captures the secular change in price associated with the advance, obsolescence and reduced manufacturing costs of cellular technology; and the fixed effect associated with LTE technology. *Id.* Having controlled for the observable differences between LTE and 3G handsets, Dr. Putnam separated—or apportioned—the price paid for LTE from other technology in the price of an LTE handset. *Id.* ¶ 156. The residual difference in handset prices between 3G handsets and LTE handsets, after accounting for the many observable differences, is the LTE premium. *Id.* Thus, the LTE premium does not include the contributions of other technology to the price of an LTE handset.

After isolating the value of LTE, Dr. Putnam then apportioned the value of Evolved's patent families among other LTE essential patent families. Specifically, Dr. Putnam determined the share of LTE value attributable to the patents-in-suit by counting the number of LTE essential patent families and then ranked the Evolved patent families among all LTE essential patent families based on a forward citation analysis. *Id.* ¶¶ 173-191.

Defendants argue the Dr. Putnam should have accounted for the incremental value of the patents-in-suit to alternatives that might have been—but were not—written into the LTE standard. D.I. 278 at 19. But Dr. Putnam explained that this approach is not applicable in the standard-setting context because it is a “winner-take-all” competition. *Id.* ¶¶ 125-127.

[A] winning invention is employed by all standard-complaint firms, while a losing invention is employed by no one. Thus, the standard-setting process has the form of a tournament, not market competition. In tournaments, the reward to the winner is not the incremental gain over the second-place finisher. The winner of a golf tournament is not compensated based on the number of strokes by which s/he wins.

*Id.* ¶ 127. Dr. Putnam explains that this phenomenon occurs because of two reasons:

[1] The prize for winning the tournament must compensate for the probability (“risk”) of not winning such that all entrants face a non-negative expected value of entry, *ex ante*. In economics, this is known as the incentive-compatibility constraint. The failure to satisfy the *incentive-compatibility constraint*, particularly when using hindsight improperly, results in a phenomenon known as “dynamic inconsistency.”

[2] The quality of competition in a tournament depends on the quality of competitors who enter the tournament. To the extent that there are gains from high-quality competition that are not captured by the tournament winner, the tournament sponsors have the incentive to offer a greater prize.

*Id.* ¶¶ 128-129 (emphasis in original). The “margin of victory” in the tournament, therefore, is not the relevant economic variable in determining the winner’s compensation. *Id.* ¶ 134. The critical economic variable is the price necessary to induce the competition that produced the winner’s winning performance. *Id.*

Dr. Putnam provides a thorough explanation based on sound economic principles for why valuation of the patents-in-suit relative to alternatives considered and rejected by the standard setting body is not applicable to these cases. Defendants’ differing opinion does not support the exclusion of Dr. Putnam testimony. The jury should be permitted to consider Dr. Putnam’s opinions related to proper apportionment of the value of the patents-in-suit from features unrelated to LTE and other LTE patents.

**2. Dr. Putnam’s use of the LTE premium in his “top-down” analysis is supported by the facts of these cases.**

Defendants’ argument that Dr. Putnam should have used the cost of the baseband chipset, or what the Defendants’ refer to as the smallest saleable patent practicing unit (“SSPPU”), as the start of his top-down approach ignores the facts of these cases. Defendants also ignore the

Federal Circuit’s rejection of a rule that “would require all damages models to begin with the SSPPU” as “untenable.” *Commonwealth Sci. & Indus. Research Org. (“CSIRO”) v. Cisco Sys., Inc.*, 809 F.3d 1295, 1303 (Fed. Cir. 2015). The Federal Circuit’s guidance in *CSIRO* confirms that proper apportionment need not start with the SSPPU. Defendants’ disagreement with Dr. Putnam’s approach is not a basis for excluding his testimony.

In his report, Dr. Putnam explains why he begins his “top-down” analysis with the LTE premium rather than the baseband chipset. As a general economic proposition, the value of productivity improvement is expressed in terms of the price of the final good that embodies it. D.I. 279, Ex. A ¶ 169(a). The final good in these cases is the mobile handset. Dr. Putnam observed that standard-essential inventions in mobile devices are not components bolted together on to a larger product; instead, they interact with one another and with non-standardized components. *Id.* ¶ 169(b). Indeed, Dr. Todor Cooklev, Evolved’s technical expert, opines that inventions embodied in the asserted patents-in-suit require more than the baseband chipset to implement. Ex. 8 at ¶ 229. Thus, there is no agreement among the experts in these cases that the baseband chipset is the smallest saleable unit.

Moreover, Dr. Putnam appropriately takes into account industry norms when determining the structure of his FRAND royalty. Dr. Putnam has observed that licensors and licensees of standard essential patents in the mobile telephone industry do not use SSPPU as a royalty base. D.I. 279, Ex. A ¶ 169(d). For example, when major contributors announced their expected LTE portfolio rates, the rates were expressed as a percentage of the mobile handset price—not the baseband chipset. *Id.* ¶ 169(d) and Schultz Decl. Ex. 2 at Fig. 2. Several Defendants also rely on wireless industry leaders who committed to licensing LTE standard patents based on a percentage

of the sale price of the handset.<sup>11</sup> In addition, Defendants have not identified any LTE license agreements produced in these cases that identifies the baseband chipset as the licensed product.

Dr. Putnam's decision to start his analysis with the LTE premium rather than the cost of or profit on the baseband chipset was based on sound economic principles and the facts of these cases. Defendants' disagreement does not render Dr. Putnam's testimony unreliable. At most, Defendants' arguments go the weight of Dr. Putnam's testimony rather than its admissibility.

**C. Dr. Putnam's division of gains is appropriate given the relevance to the facts of these cases.**

Defendants mischaracterize Dr. Putnam's division of gains as an "arbitrary rule of thumb." None of the cases Defendants rely on address the Nash bargaining solution in the context of FRAND-encumbered patents.<sup>12</sup> Therefore, none of the cases cited by Defendants address the unique facts of these cases. As FRAND-encumbered patents, the patents-in-suit are subject to the ETSI IPR Policy that "seeks a **balance** between the needs of standardization for public use . . . and the rights of owners of IPRs." Ex. 1 at 35 (emphasis added). Dr. Putnam's even division of gains reflects the balance sought by the ETSI IPR Policy. Indeed, anything other than a 50/50 division of gains would result in an **imbalance**. And while Defendants argue that there should not be an even split of gains, they offer no alternative division.

Defendants wrongly claim that Dr. Putnam has provided no support for his equal division of gains. Dr. Putnam divided the gains evenly taking into account the ETSI IPR Policy and after observing four separate economic principles, only one of which is the Nash solution. The Nash

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<sup>11</sup> "Wireless Industry Leaders commit to framework for LTE technology IPR licensing" – available at <https://www.ericsson.com/en/press-releases/2008/4/wireless-industry-leaders-commit-to-framework-for-lte-technology-ipr-licensing>

<sup>12</sup> In fact, the primary case Defendants rely on, *VirnetX, Inc. v. Cisco Sys.*, explains that district courts have addressed experts use of the Nash bargaining solution with varying results, including several where reliance on the solution was permitted. 767 F.3d 1308, 1331-32 (Fed. Cir. 2014).

solution observes that, “under very general conditions, economic equilibrium implies an equal division of the surplus if bargaining positions are symmetric.” D.I. 279, Ex. A ¶ 167(a). Dr.

Putnam notes that Dr. John Nash did not receive the Nobel Prize for the observation that bargaining parties “split the difference.” Instead, Nash’s solution, which is still taught, relied on, and advanced by economists decades later,

depends on the assumption that each party seeks to maximize its own interests, and asks: under these conditions, what is the “equilibrium” result? If bargaining positions are symmetric, the answer is that, in equilibrium, the surplus must be divided evenly by agents pursuing their own interests.

*Id.* at n.158. Thus, to compare Nash’s solution to a “rule of thumb” mischaracterizes “the nature, history, impact and vitality” of the solution. *Id.*

The second economic principle observed by Dr. Putnam is that:

[i]n the telecommunications industry operating under FRAND rules, bargaining positions are symmetric: implementers are entitled to “fair” terms and conditions, while innovators are entitled to be “adequately and fairly rewarded” for the use of their innovations.

*Id.* ¶ 167(b). The third observed economic principle is that:

[b]ecause the same firm is most often an implementer as well as an innovator, this symmetric position applies within, as well as between, bargaining agents. In other words, to maintain consistency, most firms must adopt the bargaining position of both an innovator and an implementer.

*Id.* ¶ 167(c). Defendants do not dispute that each owns and licenses patents as both innovators and implementers.

Dr. Putnam’s fourth observation looked at experimental economic studies of bargaining over the division of a surplus. When equal division of the surplus is frequently observed, “fairness” is the usual justification. *Id.* ¶ 167(d). And “fairness” is required here, where the ETSI IPR Policy seeks to “fairly reward[]” IPR holders and to “balance” the needs of implementers and innovators.

Finally, Defendants complain that the studies Dr. Putnam relies on “do not take into consideration the facts of any of these cases against Defendants.” (D.I. 278 at 21). But the FRAND obligation requires Evolved to be non-discriminatory in the terms and conditions of its licenses. Therefore, Dr. Putnam’s division of gains is an “industry-wide split” that does not require relying on data specific to each Defendant. Ex. 9 at 66:24-67:4. Dr. Putnam testified that the division is “supposed to be something that treats innovators as groups fairly and it does not take into account things that are idiosyncratic to one party, because you’re supposed to reach a non-discriminatory result, a result that is fair to all parties.” Ex. 7 at 69:15-24.

In Dr. Putnam’s 37 years of training and experience, the prediction of equal division of the surplus, given symmetric bargaining positions, has been shown to be deeply grounded in economic theory and experimental analysis. He is not aware of any theoretical or empirical reason why innovators or implementers, as distinct classes, should receive more or less than this equal share. D.I. 279, Ex. A ¶ 167. Tellingly, Defendants own experts have not identified any theoretical or empirical reason for altering the equal share. Defendants merely argue it should not be an equal division. Defendants’ disagreement with Dr. Putnam is not a basis to exclude his testimony and Defendants’ motion should be denied.

## **VII. CONCLUSION**

Dr. Putnam’s detailed analysis and opinions are supported by the evidence from these cases as well as his experience, specialized training, and professional judgment. His methodology and qualifications are more than sufficient to satisfy *Daubert*. Dr. Putnam’s testimony will assist the jury in determining the outcome of a hypothetical negotiation for a FRAND license to the patents-in-suit. Defendants’ arguments go the weight of Dr. Putnam’s testimony rather than its admissibility. Accordingly, Defendants’ motion should be denied.

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Respectfully submitted,

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